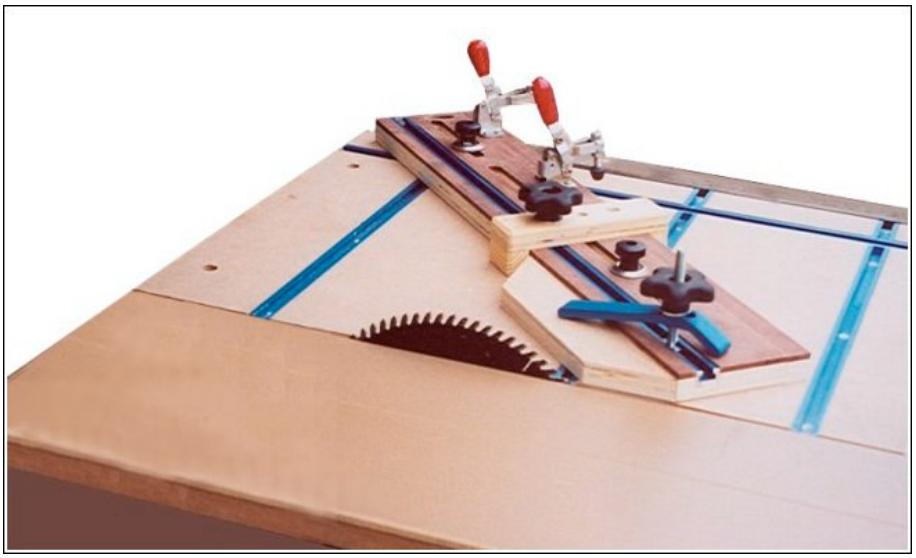
www.BobsPlans.com

Table Saw Jig

Plans & Instructions



This easy to make jig will give your table saw capabilities most woodworkers have long dreamed for. It not only enables you to make precision cut on even the sharpest angles, it makes your work safer because you can keep your hands well away from the blade.

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Introduction

Thank you for purchasing our Table Saw Jig Plans. Please read these instructions before starting.

I hope you will find this jig to be as useful as I have. By being able to clamp the work piece securely in the position you want, you can make cuts more accurately and safer than with a traditional miter gauge.

Below are some of the benefits you'll realize with your Table Saw Jig.

- The Stationary Section supports the work piece at the same height as the Sled Section.
- Both sections are flush with edge of the saw blade. This has the effect of a zero clearance blade insert and minimizes tear out on the bottom of the work pieces.
- Make precision miter cuts – *even at very sharp angles* – without the saw blade pulling the work piece away from the fence.
- Cut tapers with the work piece held securely at the proper angle.
- Hold very small work pieces at the desired position and angle while keeping your hands safely away from the blade.
- Use the stop block to make repetitive cuts.

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Table Saw Jig

Materials List

Qty	Item	Size	Material
1	Sled Section	18” by 24” by 1”	Countertop Material , MDF, or Particle Board
1	Stationary Section	9” by 24” by 1”	Countertop Material , MDF, or Particle Board
1	End Cap	9” by 1 ¼” by ¼”	¼” Hardboard or Plywood
1	Universal Fence	5” by 24” by 1”	Countertop Material , MDF, or Particle Board
1	Miter Track Bar	24” by ¾” by 3/8”	Steel, UHMW (Plastic), or Hardwood
2	T-Track	24” by ¾” by ½”	
3	T-Track	15” by ¾” by ½”	
3	T-Track (Optional)	2 ¼” by ¾” by ½”	
4	T-Track Knobs	5/16” Dia. Threads	
2	Hold Down Clamps		
2	Toggle Clamps		

Note: Two 4 foot sections of T-Track will be enough for all but the three 2 ¼” pieces on the side of the Sled Section. If you have used T-Track before, you already may have enough to make these sections. If not, you’ll need at least nine more inches of T-Track for these pieces.

Sources - Links

Miter Track Bar

T-Track with hardware & knobs

T-Track with hold down clamps

Toggle Clamps

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Table Saw Jigs & Accessories

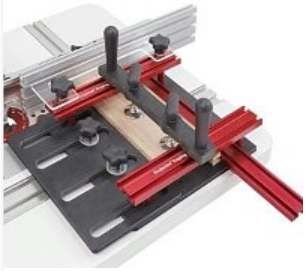
Incra Build It System
www.woodcraft.com

Cross Cut Sled
www.rockler.com

Incra Miter Sled
www.woodcraft.com

Pinnacle Premium Coping Jig
www.woodcraft.com

Rockler Coping Jig
www.rockler.com



Woodpeckers Coping Sled
www.sears.com

Kreg Miter Gauge
www.woodcraft.com

45° Miter Sled
www.rockler.com

Incra Miter Guage
www.woodcraft.com

Universal Fence Clamps
www.rockler.com

Table Saw Taper Jig
www.woodcraft.com

Micro Jig Gripper
www.woodcraft.com

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T-Track & Jig Hardware

Kreg T-Track
www.sears.com

Rockler T-Track Kit
www.rockler.com

INCRA-T-Track
www.woodcraft.com

Rockler Hold Down Kit
www.rockler.com

Cam Clamp
www.woodcraft.com

Hold Down Clamp
www.sears.com

Kreg Miter Bar
www.woodcraft.com

Rockler Miter Bar
www.rockler.com

Woodpeckers Miter Bar
www.woodcraft.com

Oval Nuts Kit
www.woodcraft.com

Plastic Knob Kit
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Jig Hardware Kit
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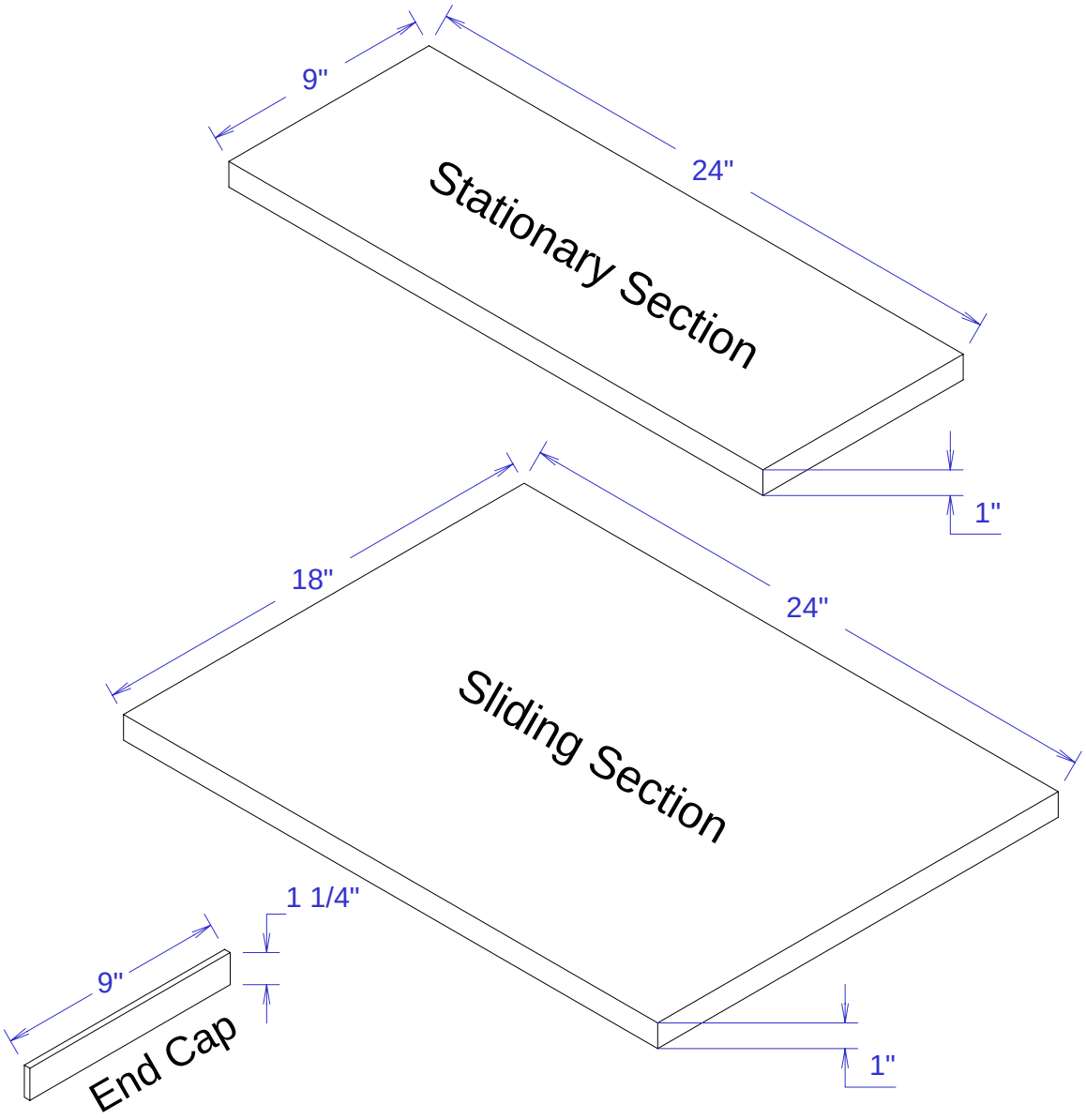

To start, cut a piece of material 24" by 18" for the sled section and a piece 24 by 9" for the stationary piece as shown.

Since the laminate side has less surface friction than the MDF side, you'll want the sled section to have the laminate side down. Plus, the top surface of the sled section needs some friction so the clamps will hold the work piece securely. For the stationary section, the laminate side goes up.

Cut a piece of 1/4" thick material 9" long by 1 1/4" wide for the stationary section End Cap. The End Cap keeps the stationary section from sliding along the saw table.

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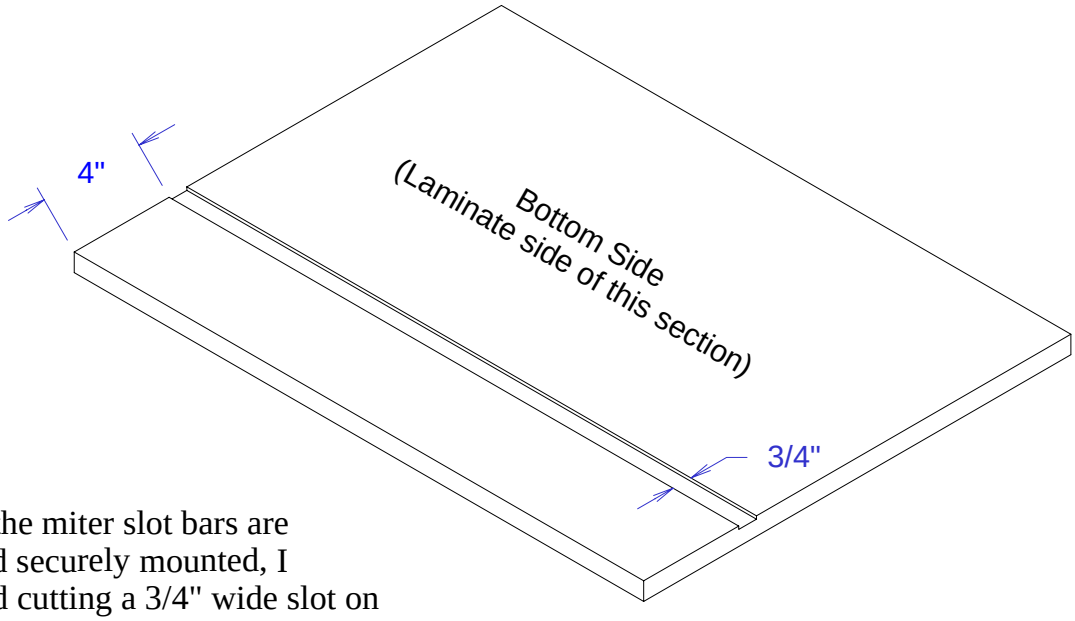
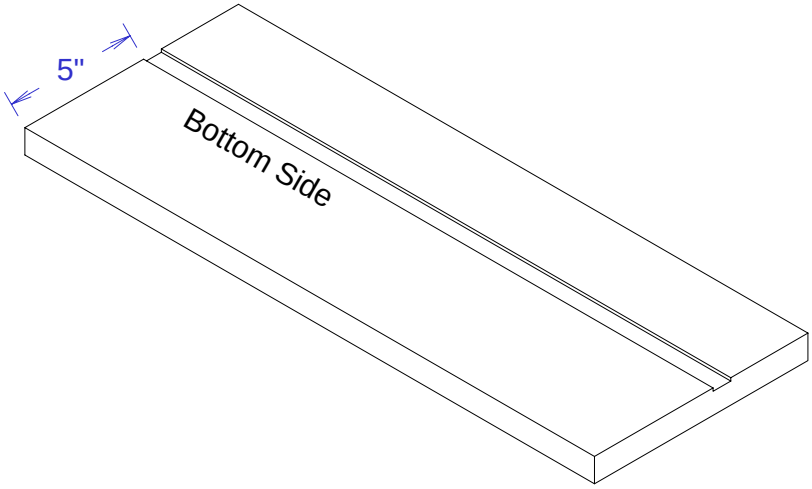
Table Saw Jig - Cutting the Miter Bar Slots



To ensure the miter slot bars are parallel and securely mounted, I recommend cutting a 3/4" wide slot on the bottom side of both sections.



For the prototype, I made a miter slot bar from UHMW and it works fine. Ready made miter slot bars are available in 18" and 24" lengths. If you use a ready made bar, a 1/16" deep slot should be fine. For UHMW, you'll need a slot slightly deeper than 1/8". This is because the miter gauge slot in table saws is usually 3/8" deep. You can buy either the UHMW or the ready made ones from Rockler. I'm sure other sources have them too but I have not checked for them anywhere else.

The slot for the sliding section must be parallel to the edge of saw blade in order to get accurate cuts!

The drawing gives approximate dimensions of 4" and 5" from the edges but this dimension will vary from one table saw to another. The actual dimension should be the distance between the edge of your table saw's blade and the closest edge of the miter gauge slots. This will result in the edges of the jig sections being flush with the saw blade and will have the same effect as a zero clearance saw insert. This makes a big difference when cross cutting because it leaves a clean cut on the bottom of the work piece.

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Table Saw Jig - Cutting the T-Track Slots

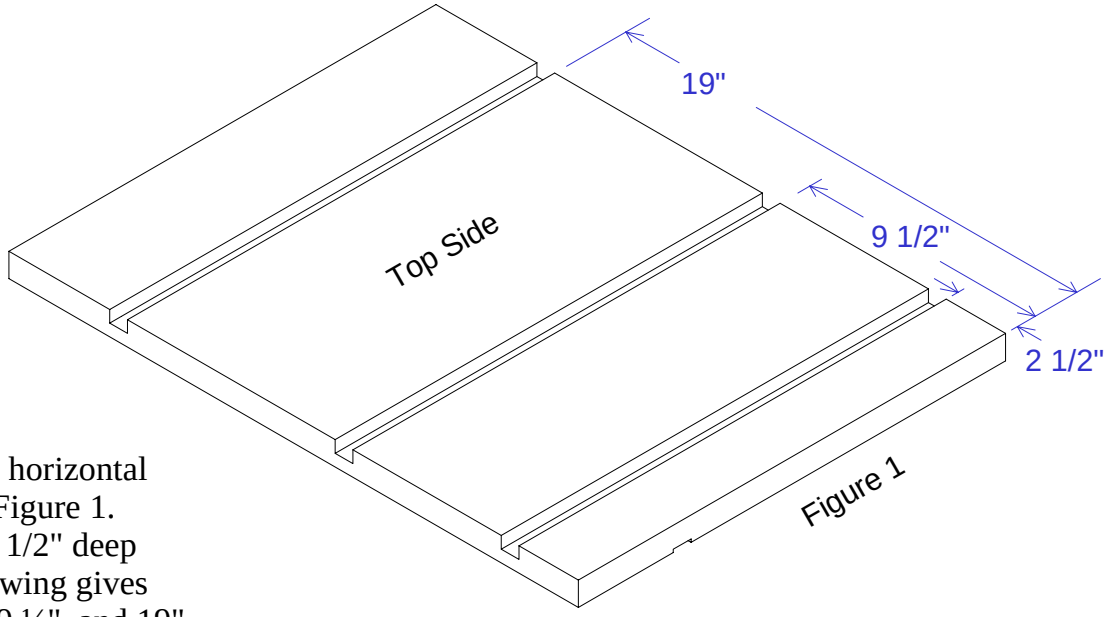

Figure 1

Cut three slots for the horizontal T- track as shown in Figure 1. These slots should be 1/2" deep and ¾" wide. The drawing gives dimensions of 2 ½", 9 ½", and 19" from the front. If you prefer a different layout, I'm sure your ideas will work as well as mine. The important thing is that when the jig is finished you will be able to position the fence in any position you want.

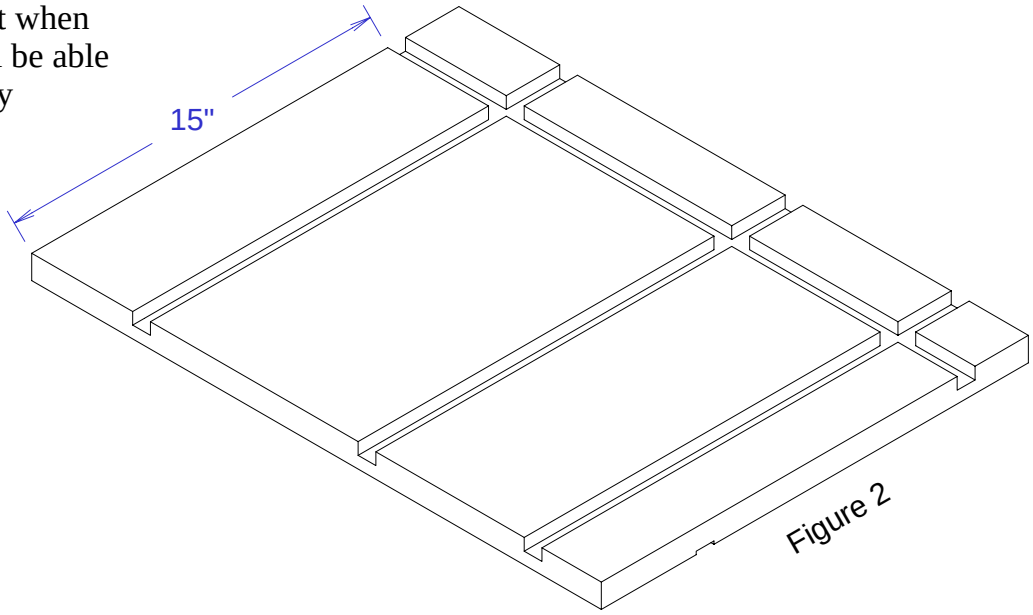

Figure 2

Next, cut a slot for the vertical T- Track as shown in Figure 2. This slot should also be 1/2" deep and ¾" wide. The drawing gives a dimension of 15" from the left edge of the jig. This distance determines the length of the horizontal T-Track pieces. This dimension was chosen because we can get three 15" pieces of T-Track from one four foot section with a minimum of waste. Again, if you prefer a different layout, I'm sure your ideas will work as well as mine.

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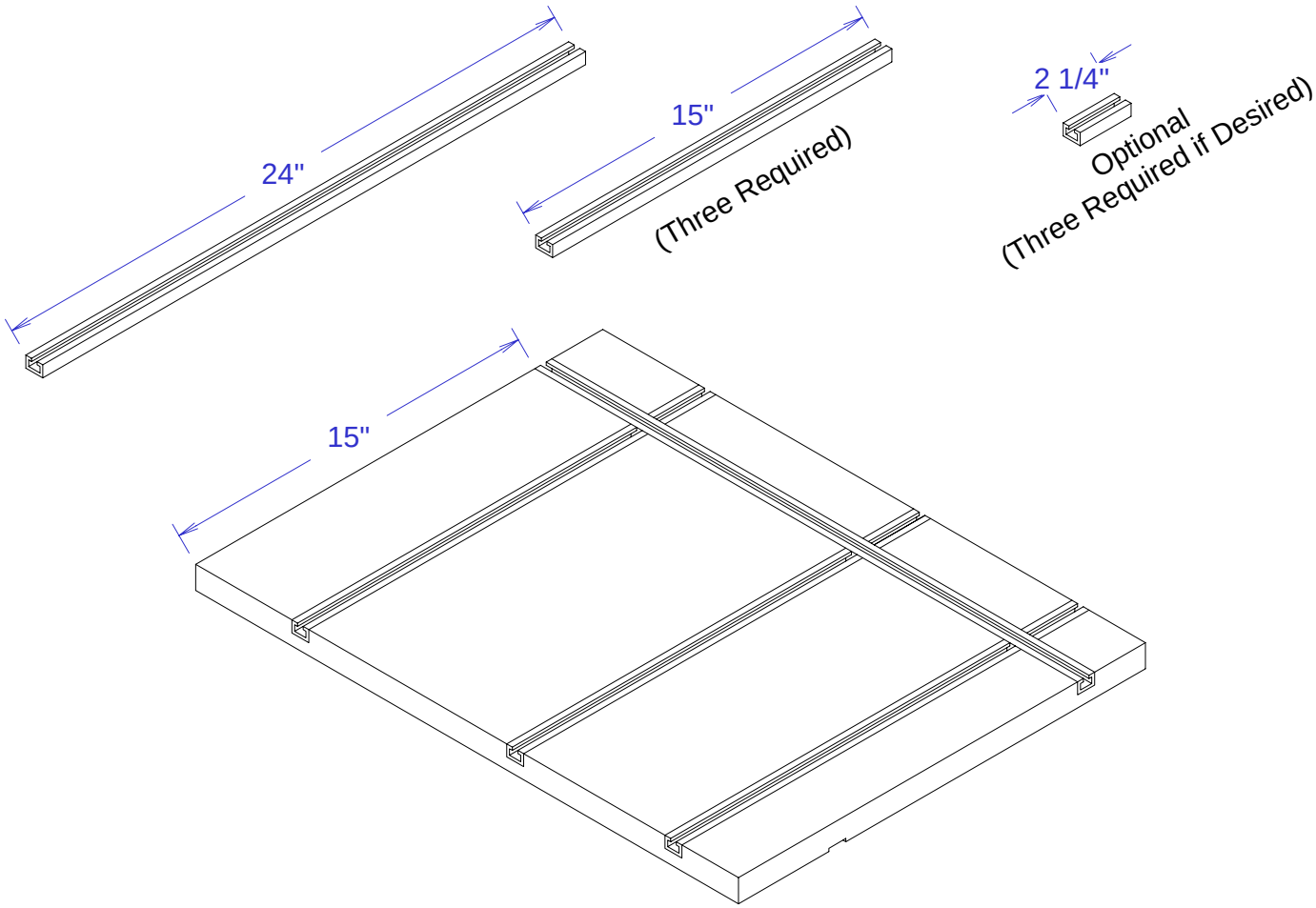
Table Saw Jig - Cutting & Mounting the T-Track



Cut T-Track to fit the slots then drill and countersink holes in the T-Track for # 8 flathead screws. The screw hole locations given below are approximate. There will already be some holes in the T-Track and you may prefer to use the pre-drilled holes if they are close to the right locations.

The 15" pieces need 3 screws. Holes 1 inch from each end and the center.
The 24" piece needs 4 screws. Holes 1 inch from each end and 8 inches from each end.
The 2 1/4" pieces need 2 screws. Holes ½" from each end.

Predrill the screw holes in the jig sections with a 7/64" bit so the screws don't create bumps on the bottom. Secure the T-Track with 5/8" long # 8 flathead screws.

Note: It will require two 48" sections of T-Track for the three 15" pieces, 24" piece for the sled, and the 24" piece for the universal fence.
You can leave the 2 1/4" sections out and add them later when you have enough T-Track left over from some other project.

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Table Saw Jig -Attach the Miter Bars

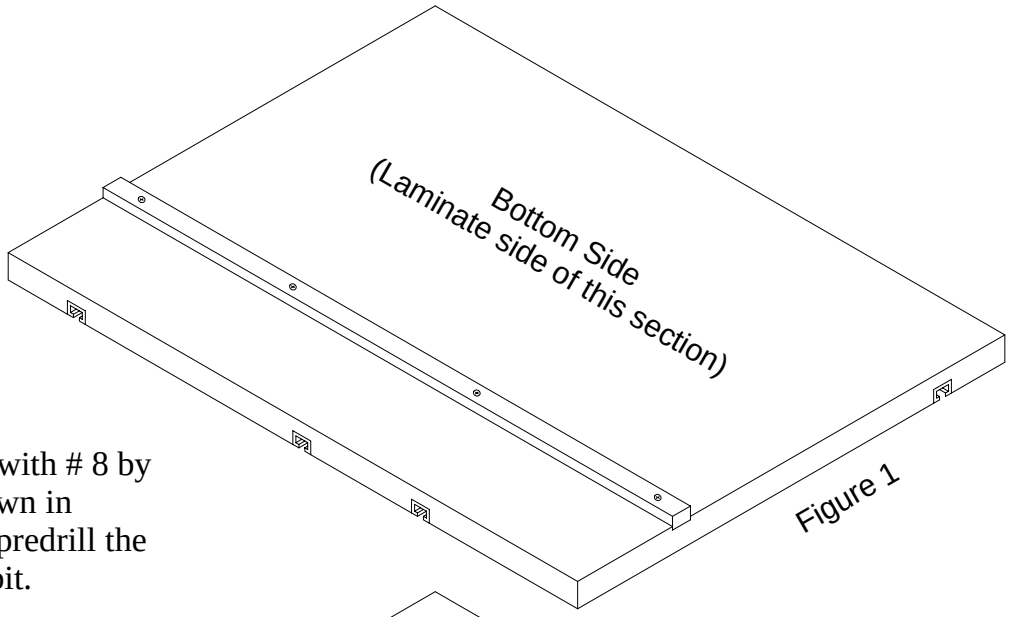

Figure 1

Attach the miter slot bars with # 8 by 1" flat head screws as shown in Figures 1 & 2. Be sure to predrill the screw holes with a 7/64" bit.

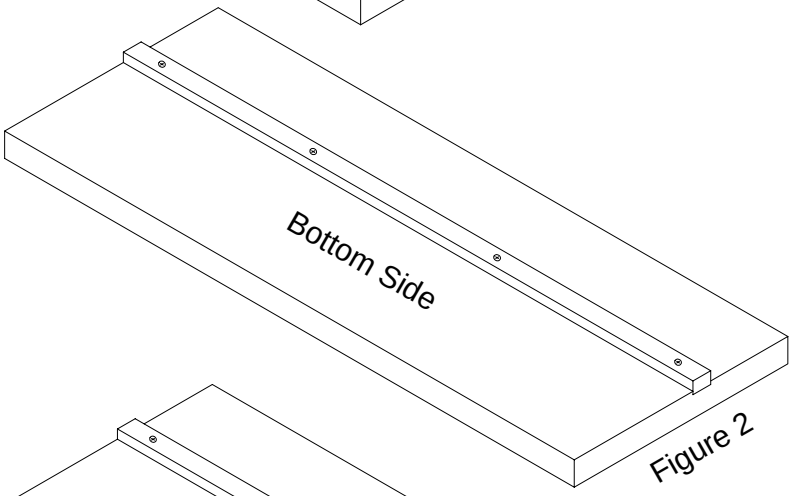

Figure 2

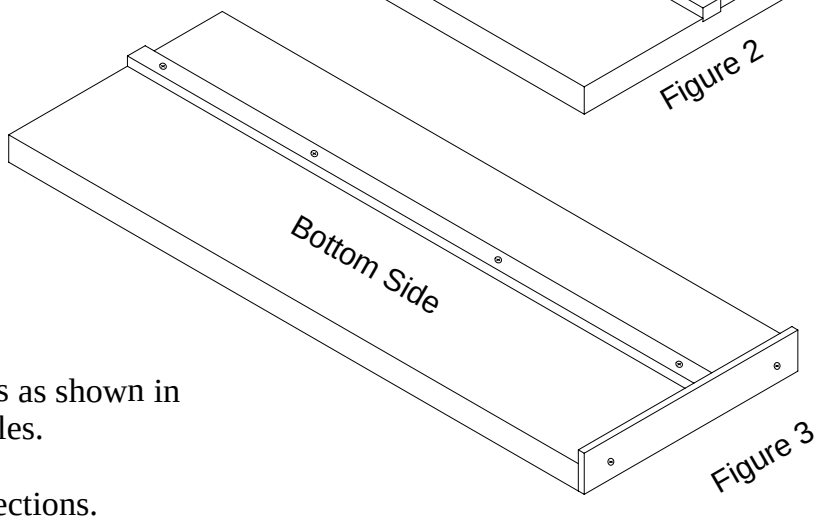

Figure 3

Attach the End Cap with # 8 by 1" screws as shown in Figure 3. Be sure to predrill the screw holes.

This completes the Stationary and Sled sections.

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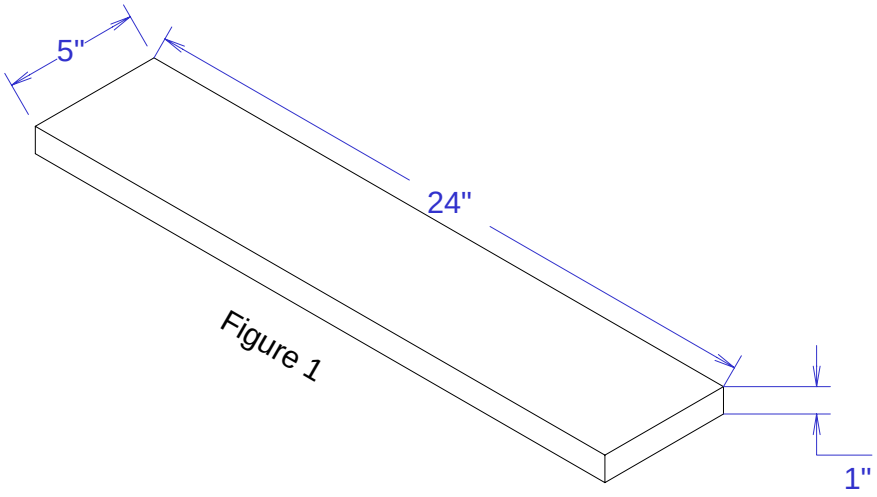

Figure 1

Cut a piece of stock 5" by 24" long. This material needs to be 1" thick. For my jig, I glued some ¼" hardboard to some ¾" plywood you get the proper thickness. Actually, the plywood was a little less than ¾" and the hardboard was a little less than ¼". This resulted in the points of the screws for the T-Track protruding below the surface on the bottom. I used a flat file to make them flush with the bottom surface and it works fine.

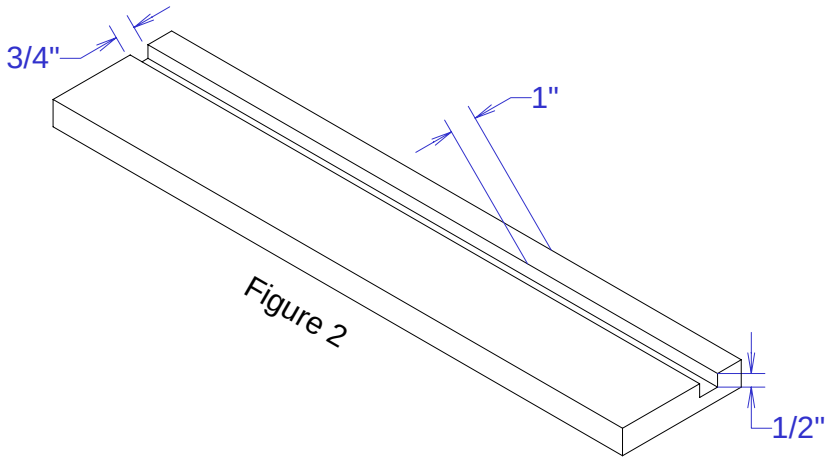

Figure 2

Cut a ¾" wide by ½" deep slot for the T-Track. This slot is 1" from the edge of the work piece.

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Table Saw Jig - Cutting the Fence Slots

Cut 4 slots as shown in Figure 1. The end slots are 3/8" wide by 5" long. The Middle slots are 3/8" wide by 4 ¾" long. These slots are for the T-Track bolts and should enable you to position the fence in any position you need.

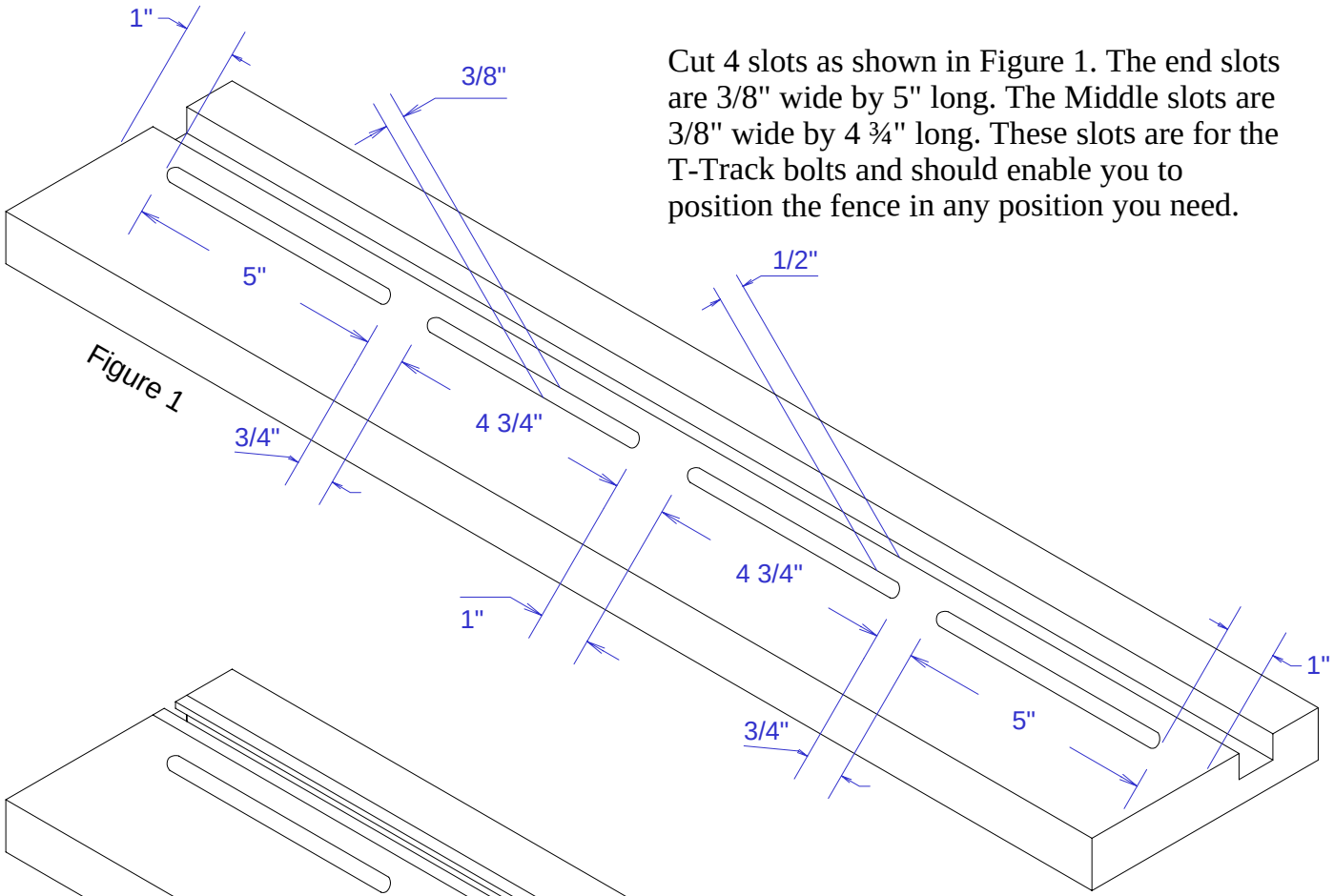

Figure 1

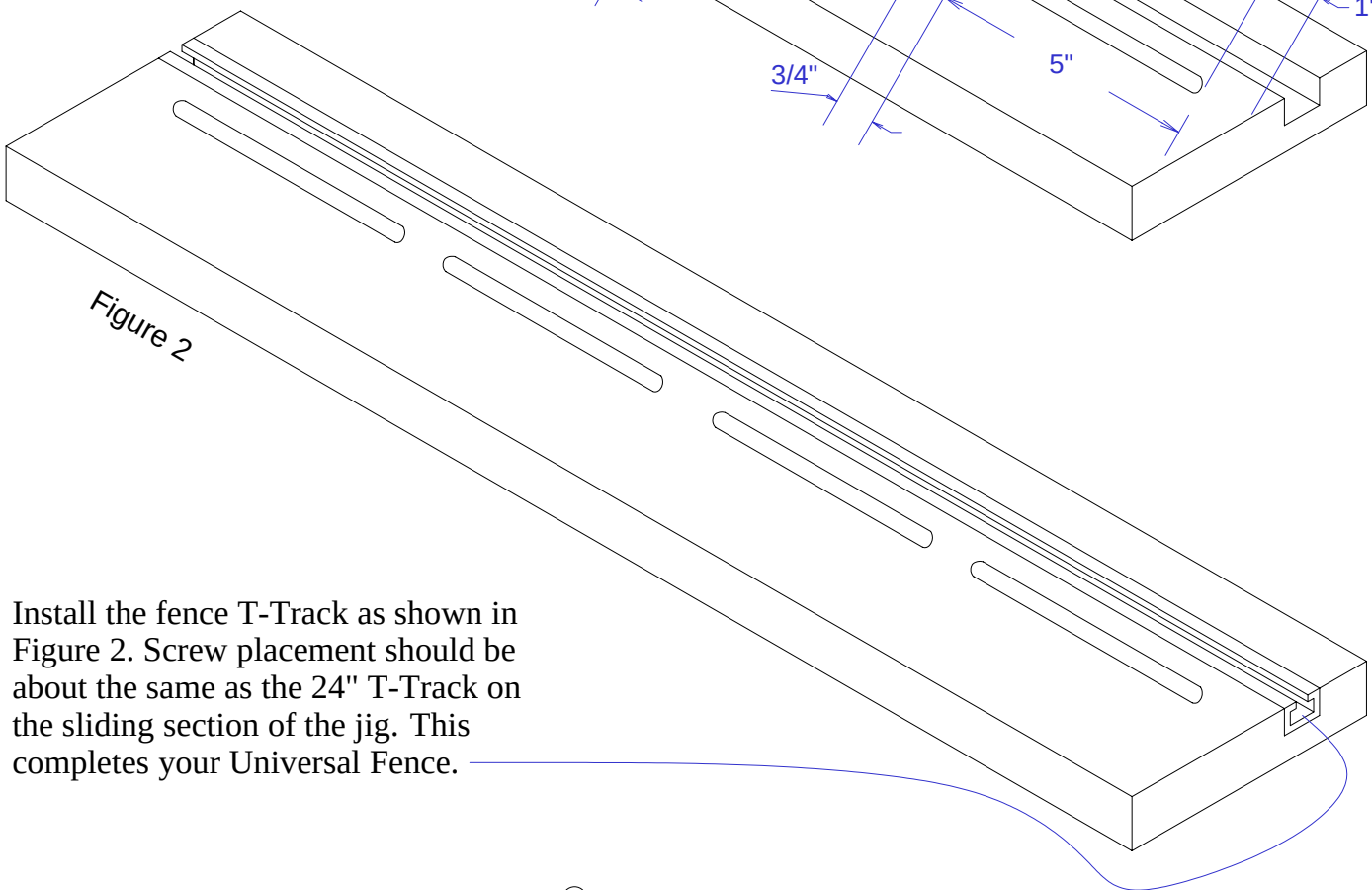

Figure 2

Install the fence T-Track as shown in Figure 2. Screw placement should be about the same as the 24" T-Track on the sliding section of the jig. This completes your Universal Fence.

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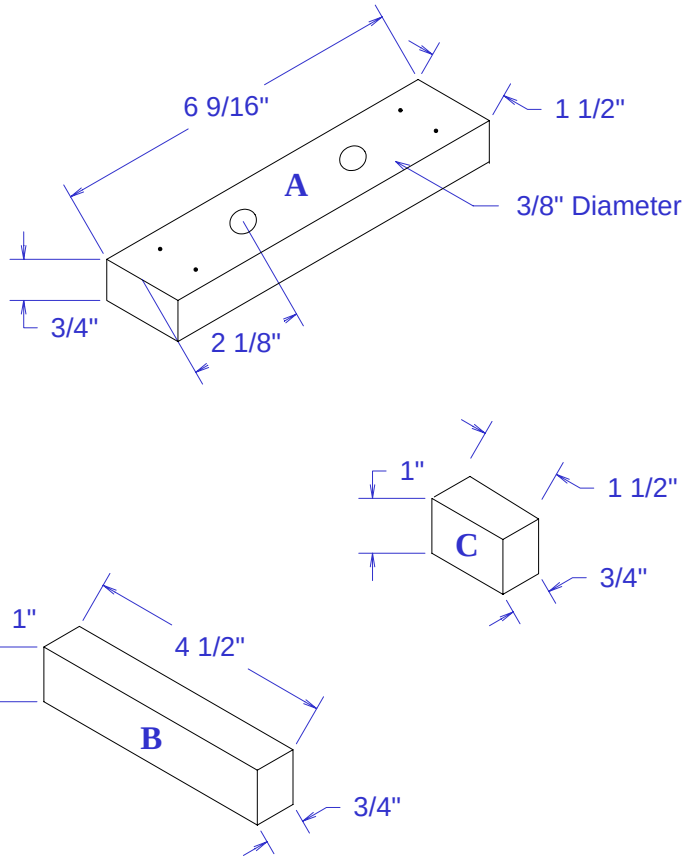
Table Saw Jig - Making the Sliding Stop Block

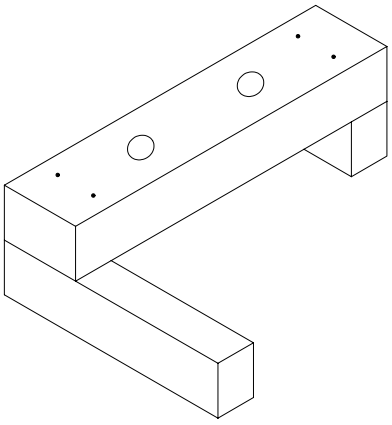
Cut the pieces A, B, and C from 3/4" stock as shown to the right. Then, drill the two 3/8" holes for the T-Track bolts in piece A. These holes allow you to position the Sliding Stop Block along the fence with either the long stop or the short stop against your work. You should also pre-drill two 1/16" holes 3/8" from each end for the finishing nails so the nails won't split the wood.

(Piece B is 4 ½" long so you can use the stop block with a clamp when working with very small work pieces.)



Assemble the Sliding Stop Block with glue and 1 ½" finishing nails as shown.

This completes your Table Saw jig.



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